

# SPECIFICATIONS AND CONTRACT DOCUMENTS FOR THE INSTALLATION OF ONE (1) SELF-SUPPORTING COMMUNICATIONS TOWERS FOR BEAVER COUNTY EMERGENCY SERVICES

**BEAVER COUNTY COMMISSIONERS** 

BEAVER COUNTY COURTHOUSE 810 THIRD STREET BEAVER, PA 15009

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5.0

Attachments

#### **REQUEST FOR BIDS**

The Board of Commissioners of the County of Beaver, Pennsylvania, is requesting sealed bids for the <u>Installation of One (1) Self-Supporting Communications Tower for Beaver County</u>

Emergency Services.

Bid forms and specifications may be obtained from Wayne Souffrant, Director of Central Services for the County of Beaver, Beaver County Courthouse, 810 Third Street, Beaver, Pennsylvania 15009, or on the Beaver County website, at <a href="https://www.beavercountypa.gov">www.beavercountypa.gov</a>, under Bids and Proposals.

#### All bids must be submitted on bid forms provided by the County of Beaver.

Each bid submitted must be accompanied by a bid security in the form of a Certified Check, Cashier's Check or Bid Bond, in the amount of ten percent (10%) of the bid submitted, the same payable to the "County of Beaver, Pennsylvania". No bid will be considered unless it so guaranteed. The Bond face and accompanying power of attorney must be signed and sealed in the original. Copies or facsimiles will not be accepted.

No bid or any portion thereof may be withdrawn after the bid opening date herein specified or during the ensuing forty-five (45) days thereafter.

Sealed bids will be received until 4:30 p.m., MONDAY JULY 8, 2019, at the office of David Rossi, Controller of the County of Beaver, First Floor, Beaver County Courthouse, Beaver, PA 15009, and all bids so received shall be opened and read aloud at or about 9:00 A.M., prevailing time, on TUESDAY, JULY 9, 2019, at a duly convened meeting of the Board of Commissioner's Public Meeting Room, the aforementioned, Beaver County Courthouse. Award of bid will be determined and proclaimed in accordance with Section 1802 of "The County Code" of Pennsylvania, as amended, 16 P.S. Section 1802.

The Board of Commissioners reserves the right to reject any and all bids and to waive any informalities in the bids submitted as public interest may require.

County of Beaver Board of Commissioners

Daniel C. Camp III, Chairman Sandie Egley, Commissioner Tony Amadio, Commissioner

INSERT DATES: June 10 and 14, 2019

#### 2.0 General Specifications

#### COUNTY OF BEAVER BEAVER COUNTY COURTHOUSE BEAVER, PENNSYLVANIA 15009

SPECIFICATIONS AND CONTRACT DOCUMENTS FOR THE INSTALLATION OF ONE (1) SELF-SUPPORTING COMMUNICATIONS TOWER FOR BEAVER COUNTY EMERGENCY SERVICES

#### 2.1 Scope of Work

The Board of Commissioners of the County of Beaver, Commonwealth of Pennsylvania, is requesting sealed bids for the Installation of One (1) Self-Supporting Communications Tower for Beaver County Emergency Services, to be constructed in accordance with the terms and specifications hereinafter specified.

#### 2.2 Bid Forms

All bids must be submitted on the bid forms attached. All bids shall be submitted in a sealed envelope prominently marked, "Bid Proposal for Installation of One (1) Self-Supporting Communications Tower for Beaver County Emergency Services". All bids must be received and in the hands of the Controller of Beaver County, David Rossi, in the Controller's Office, First Floor, Beaver County Courthouse, 810 Third Street, Beaver, PA 15009, by 4:30 P.M., prevailing time, on MONDAY JULY 8, 2019. All bids so received shall be opened in public and read aloud at or about 9:00 A.M., prevailing time, on TUESDAY JULY 9, 2019, at a duly convened meeting of the Board of Commissioners of the County of Beaver, to be held in the Commissioner's Public Meeting Room, First Floor, Beaver County Courthouse, 810 Third Street, Beaver, PA 15009. Award of any bid will be determined and proclaimed following the opening of bids or at a subsequent public meeting of the Board of Commissioners of Beaver County to be held within forty-five (45) days after the bid opening and for a period of forty-five (45) days thereafter. The time and place of any subsequent public meeting to determine and proclaim award of bid shall be publically announced by the Board of Commissioners prior to adjournment of its meeting at which the bid opening shall have taken place.

#### 2.3 Affidavit Forms

All bids must be signed by the bidder or an authorized representative. When requested, satisfactory evidence of the authority of any officer or attorney-in-fact signing in behalf of a corporation or association shall be furnished. Each bid must be accompanied by the annexed "Affidavit of Non-Collusion", the "County Affidavit" and the "Affidavit of Worker's Compensation Act", properly executed by the aforesaid bidder or an authorized representative. Any bid not so accompanied by the affidavits shall not be considered.

#### 2.4 <u>Taxes</u>

Bid prices quoted must include design, furnishing of materials, delivery and labor to install the items herein requested. All bid prices quoted for the finished project/product shall not include federal and/or state taxes. Beaver County, being a governmental body is, by law, exempt from paying such taxes. However, the bidder is not exempt from paying any taxes on purchases made for equipment and materials required to complete the finished project/product. Therefore, on formulating a bid, the bidder should consider any taxes that may occur when purchasing equipment and/or materials for the project.

#### 2.5 Discrepancies/Interpretations/Corrections

Should any bidder find discrepancies or omissions in the General Specifications or should any bidder be confronted with doubt as to the meaning of said General Specifications, said bidder should notify in writing, Wayne Souffrant, Director of Central Services of Beaver County, Beaver County Courthouse, 810 Third Street, Beaver, PA 15009 or by telephoning (724) 770-4461. Questions regarding technical specifications, design, sites, etc. contained in the Detailed Specifications, shall be directed to Randy Foster, Bearcom Communications, Inc., at randall.foster@bearcom.com. Notifications shall be made no less than seven (7) days prior to the date set for receipt of bids.

Interpretations and/or corrections will be made to all bidders of record in the form of an addendum to the Specifications. All addenda will be mailed/emailed to each bidder, but it shall be the bidder's responsibility to make inquiry as to the addenda issued. All such addenda shall become part of each contract and all bidders shall be bound by such addenda, whether or not received by the bidder.

#### 2.6 Delivery/Installation/Exceptions Addendum

Design, delivery, furnishing and installation of the items covered by the Specifications shall be made in the manner provided for in the Detailed Specifications hereinafter set forth. In every case where the bidder cannot comply with the Specifications herein above contained and those hereinafter given in the Detailed Specifications and Agreement which follow, the bidder shall list all exceptions thereto in the Exceptions Addendum attached to the Bid Form. Unless exception is made and so taken, the bid will be received in every remaining respect as in full conformity with the Specifications hereof.

#### 2.7 Method of Award

The County of Beaver reserves the right to accept or reject any or all bids and award a contract which is deemed to be in its best interest to the lowest qualified bidder in accordance with available funds.

#### 2.8 Bonds

#### 2.81 Bid Bond

Every bid shall be accompanied by a Certified Check, Cashier's Check or Bid Bond, of any surety company authorized to do business in the Commonwealth of Pennsylvania, the sum payable to the County of Beaver, in the amount of ten percent (10%) of the bid submitted, to guarantee the performance of the contract. No bid shall be considered unless so guaranteed. Every Certified Check, Cashier's Check and Bid Bond will be held until the successful bidder has executed a written contract for the performance of the bid within ten (10) days after written notice of the award of the contract, whereupon all bid security received from all the bidders shall be returned. The Bond face and accompanying power of attorney must be signed and sealed in the original. Copies or facsimiles will not be accepted.

In the event the successful bidder shall fail to execute the Agreement attached hereto within the ten (10) day period herein above provided, a default shall thereby occur, and the County of Beaver reserves the right to retain the proceeds of the bid security accompanying the bid as fixed, agreed and liquidated damages and the further right within the forty-five (45) day period ensuing after bid opening to award the bid to the next lowest responsible bidder.

#### 2.82 Maintenance Bond

Before execution of the Contract, the Contractor shall furnish a Maintenance Bond in an amount of ten percent (10%) of the total cost of the project as security for the faithful performance to the General Guarantee. The Maintenance Bond shall take effect on the date of formal acceptance of the completed Contract by the County of Beaver and shall be and remain in effect for a period of two (2) years from such date.

#### 2.83 Performance Bond (A.K.A. Contract Bond)

A Performance Bond, in the amount of one hundred percent (100%) of the contract bid price, shall be required by the successful bidder before execution of the Contract. At the time set for the execution of the contract, the successful bidder shall be required to furnish a Performance Bond in an amount equal to one hundred percent (100%) of the full contract price, such bond to be executed by a surety company licensed to do business in the Commonwealth of Pennsylvania and acceptable to the Law Department of the County of Beaver. The Performance Bond shall serve as security for the faithful performance and completion of the work in strict accordance with the contract to be executed and part thereof, according to the true intent and meaning of said contract. The premiums on said performance bond shall be paid by the successful bidder. Failure to furnish such bond at the time for execution of said contract shall result in said award being voided.

#### 2.84 Labor and Materialman's Bond (A.K.A. Payment Bond)

A Labor and Materialman's Bond with good and sufficient surety or sureties for the protection of persons furnishing material and labor of the work shall be required before execution of the contract in a penal amount of one hundred percent (100%) of the contract price. The premiums on said Labor and Materialman's Bond shall be paid by the successful bidder.

#### 2.9 Statutes

Each bidder shall be required to execute the Affidavit of Non-Collusion and the Beaver County Affidavit, attached to the Bid Form. No bid shall be considered unless accompanied by such executed Affidavits.

NOTICE IS HEREBY GIVEN THAT THE FOLLOWING FEDERAL OR STATE STATUTES MAY BE APPLICABLE FOR THIS BID. ALL BIDDERS ARE REQUIRED TO MEET THE REQUIREMENTS OF THESE STATUTES AND ANY CONTRACT SO AWARDED WILL REQUIRED COMPLIANCE WITH THESE STATUTES IF APPLICABLE: (Additional Laws, Codes and Standards may be applicable and will be detailed in the Detailed Specifications, attached).

#### 2.91 Trade Practices Act

1. I. Trade Practices Act (71 p.s. 773.101)

#### 2.92 Steel Products Act

2. II. Steel Products Act (73 p.s. 1881)

#### 2.93 Pennsylvania Worker's Compensation Act

3. III. Pennsylvania Worker's Compensation Act (77 p.s. 1)

#### 2.94 Pennsylvania Prevailing Wage Act

4. IV. Pennsylvania Prevailing Wage Act (43 p.s. 1651)

The Minimum Wage Rates for each craft or classification of all workmen needed to perform this contract during the anticipated term thereof shall be governed by the Pennsylvania Prevailing Wage Act, approved August 15, 1961, P.L. 987, Paragraph 1, (Act No. 442). The minimum wage rates are as set forth according to the PREVAILING MINIMUM WAGE PREDETERMINATION, only when the estimated cost of the total project is in excess of \$25,000.00. Since this project is expected to exceed \$25,000.00, then it is the bidder's responsibility to include Prevailing Minimum Wage Rates for each craft or classification in his labor costs. A copy of the current Prevailing Minimum Wage Predetermination is located in the Attachments Section at the back of the bid package.

#### 2.10 Bidder's Responsibility

Each Bidder shall familiarize himself with all of the attached forms, advertisement, instructions, specifications, insurance requirements and bonds, as he will be held responsible to comply therewith.

The Detailed Specifications contain the detailed provisions required for the performance of the project. No information obtained from any officer, agent or employee of the County of Beaver on any such matters shall in any way affect the risk or obligation assumed by the Contractor or relieves him from fulfilling any of the conditions of the Contract.

The County of Beaver reserves the right to waive any informalities in or reject any or all bids or accept any bid which it deems to be in its best interest. Qualifications attached to any bid or any other apparent deviations from the Specifications and may be automatic cause for immediate disqualification of any such bid received.

Proposals which are incomplete, unbalanced, conditional or obscure or which contain additions not called for, erasures, alterations or irregularities of any kind or which do not comply with the instructions to Bidders may be rejected at the option of the County of Beaver.

#### 2.11 Alternate Bids and Addenda

Alternate Bids, except as noted herein, will not be considered.

During the bidding period, bidders may be furnished addenda or bulletins for additions to or alterations of the Drawings or Specifications, which shall be included in the work covered by the proposal and become a part of the Contract Documents. It shall be the responsibility of each bidder to make himself aware of all addenda issued prior to the bid opening.

#### 2.12 Contract Agreement/No Lien Agreement

The successful low bidder chosen for this project will be provided with copies of the Contract Agreement and No-Lien Agreement to sign and return along with the required bonds and insurance certificate prior to execution of the contract by the Beaver County Board of Commissioners.

### 2.13 Beaver County Stabilization Agreement

It is the responsibility of interested bidders to read and understand the Beaver County Stabilization Agreement included in the Attachments section of the bid package. If the bidder's Base Bid Price exceeds \$50,000.00, then the bidder, including all his subcontractors, must be able to meet all of the requirements of Addendum A included in the Stabilization Agreement prior to Submission of a bid for this project. If all nine (9) requirements cannot be met, please do not submit a bid for this project. In the event the apparent low bidder cannot provide written documented proof of compliance and qualifications to the Addendum A requirements, the County shall reject that bid and consider the next lowest bid

# 3.0 Documents Supplied by Contractor/Vendor

<u>3.1</u>	Bid Proposal Form	
	BID LETTING OF July 8, 2019	
For:	The Installation of One (1) Self-Supporting Communications Tower for Beaver County Emergency Services	To: County Of Beaver
	ot as may be modified by the Exceptions Addendum ses and agrees to furnish material and labor for ex	
Towe	One Description:	Total Amount:
Install	ation of 150 foot Self-Supporting Tower	\$
Date:	, 2019	
		Bidder (Organization Name)
(Telep	phone Number)	By(Authorized Representative)
		(Printed Name)
		(Address)
	d Bond or()Certified Check or()Cashier's Chec ned hereto	ck in the amount of \$

# 3.2 Exceptions Addendum

Specifications of this Proposal, shall constitute all the e	The following Addendum, to be completed in full compliance with the provisions of the pecifications of this Proposal, shall constitute all the exceptions which the undersigned bidder has taken the Specifications of this Proposal; in every other respect the bids herewith are made in full conformity ith the Specifications of the Proposal:				
-					
	Bidder				
DATED:, 2019					
	ByAuthorized Representative				

#### 3.3 Affidavit of Non-Collusion

COMMONWEALTH OF PENNSYLVANIA	)		
	)	SS.	
COUNTY OF BEAVER	)		
I,			, being duly sworn
(Name)			
according to law depose and say that I am			
	(Own	er-Partner-Corporation-C	Officer)
of			
(Name and Address of Bidder)			

who submits to the Board of Commissioners of the County of Beaver and hereby declares:

- 1. That he has read this Bid Proposal and has abided by and agrees to the conditions herein and has carefully read and examined the Proposal and Specifications and does hereby propose to furnish all equipment and do all work required in accordance with said Proposal and Specifications to Bidders for the amount indicated in this Bid Proposal.
- That said bidder has not entered into any agreement with any other bidder or prospective bidder or with any other person, firm or corporation relating to the price named in said proposal or any other proposal, nor any agreement or arrangement under which any person, firm or corporation is to refrain from bidding, nor any agreement or arrangement for any act or omission in restraint of free competition among bidders.
- 3. That this proposal is genuine, and not sham or collusive, nor made in the interest of in behalf of any person not herein named, and that the bidder has not directly or indirectly induced or solicited any other bidder to put in a sham bid, and that the bidder has not in any manner sought by collusion to secure for himself an advantage over any other bidder.
- That said bidder has not disclosed to any person, firm or corporation the terms of said proposal or the amount of the Bid Proposal named therein.
- 5. That this Affidavit, for and in behalf of said Bidder, has read the foregoing documents of which this affidavit is a part and that the statements and representations made are true and correct to the best of his knowledge, information and belief.

# 3.3 Affidavit of Non-Collusion (cont.)

I state that	
(Name of my Firm)	
relied on by the County of Beaver in awarding the understand, and my firm understands, that any m	epresentations are material and important, and will be e contract(s) for which this bid is submitted. I hisstatement in this affidavit is and shall be treated as er of the true facts relating to the submission of bids for
	Bidder
	Biddei
	By Authorized Representative
	Authorized Representative
	(CORPORATE SEAL)
SWORN TO and subscribed before me	
this day of, 2019.	
Notary Public	
My Commission Expires:	

# 3.4 Beaver County Affidavit

AS AN AUTHORIZED REPRESENTATIVE OF	
DO HEREBY SWEAR AND AFFIRM THAT NEITHER	
OR ANY OF ITS AGENTS OR EMPLOYEES HAS GIVE	EN OR ASSIGNED OR HAS
AGREED TO GIVE OR ASSIGN ANNY AFFILIATED W	ORK TO ANY OFFICER, AGENT, OR
ASSISTANCE IN RECEIVING ANY AFFILIATED WORI	K TO ANY OFFICER, AGENT OR
EMPLOYEE OF BEAVER COUNTY OR TO ANY CONC	CERN THAT IS IN ANY WAY
AFFILIATED WITH ANY OFFICER, AGENT OR EMPLO	OYEE OF BEAVER COUNTY,
WITH AN AGREEMENT OR UNDERSTANDING TO RE	ECEIVE CONSIDERATION FOR
COUNTY BUSINESS IN CONNECTION WITH ABOVE	PROJECT AND CONTRACT.
	SIGNED:
	TITLE:
	DATE:
	WITNESS:

# 3.5 Worker's Compensation Affidavit

# ACCEPTING PROVISIONS OF THE WORKER'S COMPENSATION ACT

State of	
	SS:
County of	
(Name of Officer, if Corporation)	(Title of Officer)
	, being duly
(Corporation)	
Compensation Act of 1915 of the Common and has/have insured his/their/its liability the	that he/they/have accepted provisions of the Worker's wealth of Pennsylvania, with its supplements amendments, nereunder in accordance with the terms of said Act withCompany.
	By Signature of Officer or Agent
SWORN TO and subscribed before me	
this day of, 201	9.
Notary Public	
My Commission Expires	

#### 3.6 Insurance

The Contractor shall be responsible for all injury to persons, or damage to property, either directly or indirectly, that may result from his operations. The Contractor shall obtain and pay for such insurance as will protect him from claims under the Worker's Compensation Act and from any other claims to damages for personal injury, including death, or from damages to property, either real or personal, which may arise from operations under this Contract, whether such operations be by himself or by anyone directly or indirectly employed by him. The Contractor shall effect and maintain the following insurance policies for the duration of this contract and any extensions thereof:

- 1 Worker's Compensation Insurance including Employer's Liability Insurance in accordance with the Pennsylvania Worker's Compensation Act.
- Comprehensive General Liability Insurance, including Products/Completed
   Operations Liability Insurance, with a combined single limit per location of
   \$2,000,000.00, including bodily injury, property damage and personal injury.
- 3. Comprehensive Automobile Liability Insurance for all owned, non-owned and hired vehicles with a combined single limit of \$1,000,000.00, including bodily injury and property damage.
- Contractual Insurance

The County of Beaver shall be named as additional insured on Contractor's General Liability policy. The Contractor shall deliver to the County, before commencing work under this contract, certificates from insurance companies or their agents, certifying that such insurance is in effect and will not be cancelled during the conduct of the work, without thirty (30) days written notice to the County.

Said certificate shall name the County of Beaver, 810 Third Street, Beaver, PA 15009, as Certificate Holder. The Contractor shall report and pay all Old Age Benefits and Social Security Taxes and other insurance, as required by State and Federal Law.

#### 4.0 Project Specifications

#### 4.1 Scope of Work

The items to be furnished under this Contract shall be in accordance with these Contract Specifications:

# INSTALLATION OF ONE (1) SELF-SUPPORTING COMMUNICATIONS TOWER FOR BEAVER COUNTY EMERGENCY SERVICES

All items not expressly mentioned in the Detailed Specifications, but obviously necessary for the proper execution of the Contract, shall be furnished by the Contractor, as it is not the intent of the Specifications to delineate or describe every detail and feature of items as provided by the Contract.

#### 4.2 Location

The project location is Big Beaver Fire Station, Friendship Road, Big Beaver, PA.

#### 4.3 Payment

Payment shall be made in accordance with the lump sum bid price and applications for payment shall be submitted to Beaver County Emergency Services for review and approval. One hundred percent (100%) final payment, including retainage, shall be made by the County upon satisfactory completion. The contract amount owed will be paid only after the satisfactory inspection of the final product and all services have been completed in accordance with this specification.

#### 4.4 Schedule

The Contractor shall furnish Beaver County Emergency Services with a work schedule. The schedule shall be submitted within ten (10) days after the execution of the Contract. Schedule will be coordinated with tower manufacture.

It is hereby understood and mutually agreed by and between the Contractor and the County, that the date of beginning, rate of progress and the time for completion of the work to be done hereunder are essential conditions of this contract; and it is further mutually understood and agreed that the Work embraced in this Contract shall be completed in the number of days specified within the proposal. The Contractor agrees that said Work shall be prosecuted regularly, diligently and uninterruptedly at such rate of progress as will insure completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and the County, that the time for the completion of the Work described herein is a reasonable time for the completion of the same, taking into consideration the construction conditions prevailing in this locality.

IF THE SAID CONTRACTOR SHALL NEGLECT, FAIL OR REFUSE TO COMPLETE THE WORK WITHIN THE TIME HEREIN SPECIFIED, then the Contractor does hereby agree, as part consideration for the awarding of this Contract, to pay to the County the amount of \$500.00 per day, not as a penalty, but as liquidated damages for such breach of Contract as hereinafter set forth, for each and every calendar day, including Saturdays, Sundays and Holidays, that the Contractor shall be in default after the time stipulated in the Contract for completing the Work.

The said amount is fixed and agreed upon by and between the Contractor and the County because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the County would sustain and said amount shall be retained from time to time by the County from current periodical estimates.

#### 4.5 General Specifications

- The Contractor(s) shall be responsible for having their equipment comply with current OSHA regulations, and to have available all material safety data sheets that pertain to the products used.
- The Contractor(s) shall comply with all Federal and State laws as required.
- All work shall be done by skilled personnel in accordance with the best standard practice
  and in a manner acceptable to the County. Any work not conforming to these
  Specifications shall be corrected to the satisfaction of the County. Such corrections shall
  be made at the expense of the Contractor.
- Upon completion of the work, the area shall be left in a clean and orderly condition, and all contaminated rags and trash shall be removed.
- Upon completion of the work, the Contractor(s) are to remove all surplus materials, etc., that relate to their trade, from the premises.
- All items not expressly mentioned in the Specifications, but obviously necessary for the
  proper execution of the Contract, including building permits, shall be furnished by the
  Contractor, as it is not the intent of these specifications to delineate or describe every
  detail and feature of items as provided by the Contract.

#### 4.6 Detailed Specifications

#### Beaver County, Pennsylvania

#### **Communication Tower Installation Specification**

#### Scope of Work

The scope of this contract shall include the following:

Installation of One (1) Self-Supporting Communications Tower, in accordance to the manufacture specifications.

#### 2. Laws, Codes and Standards

The bidder is responsible for being familiar with all Federal, State and local laws, ordinances, codes, rules and regulations that may in any way affect the work required.

The following publications and standards are incorporated by reference to the following specifications:

- a. Federal Communications Commission Rules and Regulations
- b. National Electric Code
- c. Motorola R56 Standards and Guidelines for Communication Sites
- d. OSHA rules and regulations

The bidder is responsible for obtaining all permits required to complete this project with all Federal, State or local entities.

#### 3. Related Experience

All proposals must include a brief statement of the respondents understanding of the project highlighting the respondent's qualifications and ability to perform the project services.

For up to three (3) similar projects, include reference information that should contain at least the following information:

- Agency/organization name
- Contact person/phone number
- 3. Brief description of work performed

#### 4. Subcontractors

Although the use of subcontractors is discouraged, if they are requested and approved, the Contractor shall retain full responsibility to the County for all work done by the subcontractor. All subcontractors must meet all criteria defined for the prime contractor.

#### 5. Site Access

All sites have existing access roads; it is the responsibility of the bidder to move equipment and materials in and out of each site utilizing these routes. It is the bidder's responsibility to determine the best method of movement of their equipment and materials without damage to property. Any damage to property will be repaired at the expense of the Contractor.

#### 6. Site Preparation

Each site should require minimal site preparation; it is the responsibility of the bidder to prepare each site for installation.

#### 7. Safety Equipment

Bidder is responsible to provide their workers with all the required safety equipment and assure all work and equipment utilized with this project complies with OSHA or any other regulatory agency guidelines.

#### 8. Project Schedule

Beaver County will coordinate with the bidder the sequence of site installations, bidder must include a comprehensive schedule for the completion of each of the three projects, include the proposed timelines for all of the tasks identified within your work plan.

#### 9. Warranties

The services and materials supplied must be warranted to be free of defects in material and workmanship for a period of one (1) year.

#### 10. <u>Technical Drawings</u>

Attached as part of this specification are stamped and sealed tower plans executed by a State of Pennsylvania structural engineer outlining installation requirements for each tower.

#### 11. Tower Installation Specifications

These specifications establish the minimum specifications for installation of a 150 foot self-supporting communications tower and associated equipment at a site location; Big Beaver Fire Station, Big Beaver, Pennsylvania. Latitude: 40-48-26.1460, Longitude: 80-22-17.7958 NAD 83. Delivery of tower materials will be coordinated by the successful bidder with the tower manufacturer; bid must include the unloading of all tower equipment.

Tower materials to be provided by the tower manufacture and installed as part of this project include the following:

- A. Anchor bolts and templates (all other materials required for construction of the concrete pad to the manufacturer's specifications will be supplied by the bidder)
- B. Complete tower steel as bid by the manufacturer
- C. Climbing step bolts (one leg only)
- D. DBI safety cable kit and leg brackets
- E. One single rail (1.25") waveguide support ladder
- F. One 10' X 3/4" lightning rod copper clad and stiffener
- G. One 2-7/8" X 15' lightning rod extension
- H. Three 10' T-Boom (R) sector mounts with 3' standoff each with three 5' pipes at the 150' level
- 1. Three six foot sidearm's each with one tieback with one five foot mounting pipe at the 120' elevation
- J. Motorola R56 grounding

#### 12. Antenna Installation Requirements

- 1. 150' level three (3) each DB224 VHF antennas with three (3) 7/8" heliax lines mounted on the six foot standoff side arms. Heliax lines will be attached to the waveguide support ladder, grounded and properly sealed at the top and bottom of the tower. Transmission lines extend from the equipment shelter to the height of the associated antenna each transmission line will be individually marked at top and bottom with color tape. Bidder shall provide and install one (1) six (6) foot W helax jumper and compatible connectors for each antenna to provide connectivity from the antenna to the 7/8' heliax cable. Each connector must be properly sealed and weatherproof.
- 2. 120' level three (3) each DB224 FHF antennas with three (3) 7/8" heliax lines mounted on the six foot standoff side arms. Heliax lines will be attached to the waveguide support ladder, grounded and properly sealed at the top and bottom of the tower. Transmission lines extend from the equipment shelter to the height of the associated antenna each transmission line will be individually marked at the top and bottom with color tape. Bidder shall provide and install one (1) six (6) foot 1/z" helix jumper and compatible connectors for each antenna to provide connectivity from the antenna to the 7/8' heliax cable. Each connector must be properly sealed and weatherproof.
- 3. 100' level two (2) HPD3-4.7 parabolic reflector antennas. One to be installed at this site and the other to be installed on our Baden site at the same height. Heliax lines will be attached to the waveguide support ladder, grounded and properly sealed at the top and bottom of the tower. Transmission lines extend from the equipment shelter to the height of the associated antenna, each transmission lime will be individually marked at top and bottom with color tape. Bidder shall provide and install one (1) six (6) foot 1/z helix jumper and compatible connectors for each antenna to provide connectivity from the

antenna to the 7/8' heliax cable. Each connector must be properly sealed and weatherproof.

4. 150' level – one (1) each DB420 UHF antenna with one (1) 7/8" heliax line mounted on the six foot standoff side arm. Heliax lines will be attached to the bottom waveguide support ladder, grounded and properly sealed at the top and bottom of the tower. Transmission lines extend from the equipment shelter to the height of the associated antenna each transmission line will be individually marked at top and bottom with color tape. Bidder shall provide and install one (1) six (6) foot 1/z" helix jumper and compatible connectors for each antenna to provide connectivity from the antenna to the 7/8' heliax cable. Each connector must be properly sealed and waterproof.

#### Antennas, heliax lines, connectors, grounding material and hangers to be provided by the bidder.

Bidder must supply a complete installation package meeting all intended requirements of the specification, any components or task not outlined in this specification but required to complete this project in its entirety will be the responsibility of the bidder regardless of being identified in this specification.

#### 13. FAA Information

#### A. Big Beaver

Federal Aviation Administration Southwest Regional Office Obstruction Evaluation Group 10101 Hillwood Parkway Fort Worth, TX 76177

Aeronautical Study No. 2018-AEA-13642

(see attachment)

Issue Date: 11/27/2018

Kevin Whipple Beaver County Emergency Services 351 14<sup>th</sup> Street Ambridge, PA 15003

#### 14. Site Visits

To coordinate site visits, contact:

Kevin Whipple, Beaver County Emergency Services (724) 775-1700

# 5.0 Attachments

FAA Determination

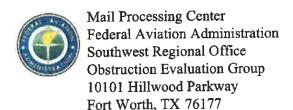
**Tower Coordinates** 

Foundation Drawings

Technical Drawings

Prevailing Minimum Wage Predetermination

Beaver County Stabilization Agreement



Issued Date: 11/27/2018

Kevin Whipple
Beaver County Emergency Services
351 14th Street
Ambridge, PA 15003

## \*\* DETERMINATION OF NO HAZARD TO AIR NAVIGATION \*\*

The Federal Aviation Administration has conducted an aeronautical study under the provisions of 49 U.S.C., Section 44718 and if applicable Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure:

Antenna Tower Big Beaver Communications Tower

Location:

Beaver Falls, PA

Latitude:

40-48-26.15N NAD 83

Longitude:

80-22-17.80W

Heights:

1220 feet site elevation (SE)

180 feet above ground level (AGL) 1400 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

It is required that FAA Form 7460-2, Notice of Actual Construction or Alteration, be e-filed any time the project is abandoned or:

	At least 10 days prior to start of construction (7460-2, Part 1)	
_X_	Trust 5 1 6 dt 4 de la marte de la marte de la contract haight (7460 2 Par	t 2)

## See attachment for additional condition(s) or information.

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking/lighting are accomplished on a voluntary basis, we recommend it be installed in accordance with FAA Advisory circular 70/7460-1 L Change 2.

This determination expires on 05/27/2020 unless:

- (a) the construction is started (not necessarily completed) and FAA Form 7460-2, Notice of Actual Construction or Alteration, is received by this office.
- (b) extended, revised, or terminated by the issuing office.
- the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE E-FILED AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE. AFTER RE-EVALUATION OF CURRENT OPERATIONS IN THE AREA OF THE STRUCTURE TO DETERMINE THAT NO SIGNIFICANT AERONAUTICAL CHANGES HAVE OCCURRED, YOUR DETERMINATION MAY BE ELIGIBLE FOR ONE EXTENSION OF THE EFFECTIVE PERIOD.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power, except those frequencies specified in the Colo Void Clause Coalition; Antenna System Co-Location; Voluntary Best Practices, effective 21 Nov 2007, will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA. This determination includes all previously filed frequencies and power for this structure.

If construction or alteration is dismantled or destroyed, you must submit notice to the FAA within 5 days after the construction or alteration is dismantled or destroyed.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission (FCC) because the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (817) 222-5932, or joan.tengowski@faa.gov. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2018-AEA-13642-OE.

Signature Control No: 389257834-390871761

(DNE)

Joan Tengowski Technician

Attachment(s)
Additional Information
Frequency Data
Map(s)

cc: FCC

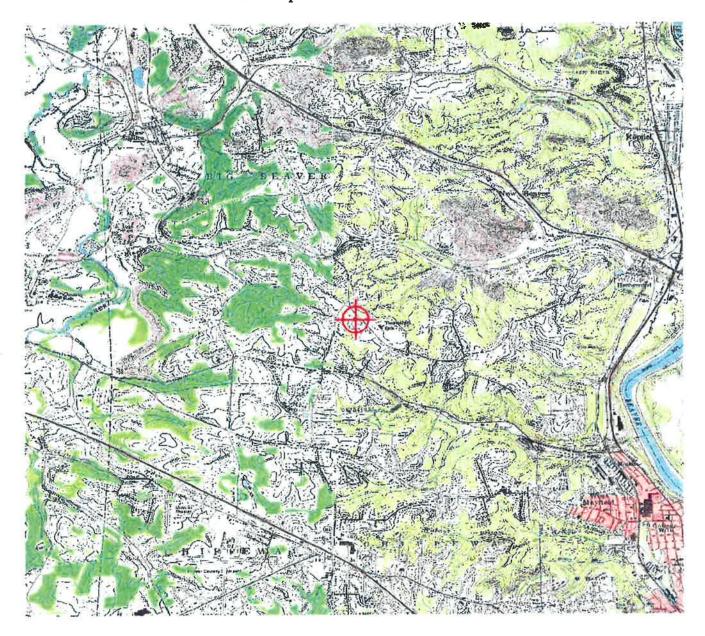
#### Additional information for ASN 2018-AEA-13642-OE

No objection provided that your spurious emissions are less than the FCC minimum requirement of -13dbm by 20db. (Example: -13dbm -20db= -33dbm).

# Frequency Data for ASN 2018-AEA-13642-OE

LOW FREQUENCY			FREQUENCY UNIT ERP	
151.01	155.775	MHz	200	kW
450	470	MHz	200	kW
806	824	MHz	500	W
824	849	MHz	500	W
851	866	MHz	500	$\mathbf{W}$
869	894	MHz	500	W

# TOPO Map for ASN 2018-AEA-13642-OE





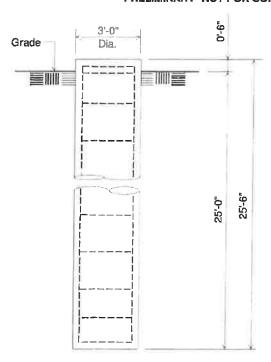
No.: 19-7992

Date: 4/29/19 By: MH

#### Customer: BEAVER COUNTY PENNSYLVANIA Site: Big Beaver Fire House PA

150 ft. Model S3TL Series HD1 Self Supporting Tower

#### PRELIMINARY -NOT FOR CONSTRUCTION-



#### **ELEVATION VIEW**

(6.7 cu. yds.) (3 REQUIRED; NOT TO SCALE)

#### Notes

- Concrete shall have a minimum 28-day compressive strength of 4,500 psi, in accordance with ACI 318-11.
- 2) Rebar to conform to ASTM specification A615 Grade 60.
- 3) All rebar to have a minimum of 3" concrete cover.
- 4) All exposed concrete corners to be charmfered 3/4".
- The foundation design is based on the geotechnical report by Resource International, Inc. Project No. N-18-033,J dated: 02/18/2019.
- See the geotechnical report for drilled pier installation requirements, if specified.
- The foundation is based on the following factored loads: Factored uplift (kips) = 152.00
   Factored download (kips) = 167.00
   Factored shear (kips) = 13.00
- 8) The bottom anchor bolt template shall be positioned as closely as possible to the bottom of the anchor bolts.

	Rebar Schedule per Pier
Pier	(8) #8 vertical rebar w/ #4 rebar ties, two (2) within top 5" of pier then 12" C/C
	Anchor Bolts per Leg
(6) 1" (	dia. x 51" F1554-105 on a 9" B.C. w/ 7" max. projection above concrete.

- C. Climbing step bolts (one leg only)
- D. DBI safety cable kit and leg brackets
- E. One single rail (1.25") waveguide support ladder
- F. One 10' X 3/4" lighting rod copper clad and stiffener
- G. One 2-7/8" X 15' lighting rod extension
- H. Three 10' T-Boom (R) sector mounts with 3' standoff each with three 5' pipes at the 150' level
- I. Three six foot sidearm's each with one tieback with one five foot mounting pipe at the 120' elevation.
- J. Motorola R56 grounding

#### **Antenna Installation Requirements**

- A. 150' level three (3) each DB224 VHF antennas with three (3) 7/8" heliax lines mounted on the six foot standoff side arms. Heliax lines will be attached to the waveguide support ladder, grounded and properly sealed at the top and bottom of the tower. Transmission lines extend from the equipment shelter to the height of the associated antenna each transmission line will be individually marked at top and bottom with color tape. Bidder shall provide and install one (1) six (6) foot W helax jumper and compatible connectors for each antenna to provide connectivity from the antenna to the 7/8' heliax cable. Each connector must be properly sealed and weatherproof.
- B. 120' level three (3) each DB224 VHF antennas with three (3) 7/8" heliax lines mounted on the six foot standoff side arms. Heliax lines will be attached to the waveguide support ladder, grounded and properly sealed at the top and bottom of the tower. Transmission lines extend from the equipment shelter to the height of the associated antenna each transmission line will be individually marked at top and bottom with color tape. Bidder shall provide and install one (1) six (6) foot ¹/z" helax jumper and compatible connectors for each antenna to provide connectivity from the antenna to the 7/8' heliax cable. Each connector must be properly sealed and weatherproof.
- C. 150' level one (1) each DB420 UHF antenna with one (1) 7/8" heliax line mounted on the six foot standoff side arm. Heliax lines will be attached to the waveguide support ladder, grounded and properly sealed at the top and bottom of the tower. Transmission lines extend from the 911 center equipment room to the height of the associated antenna each transmission line will be individually marked at top and bottom with color tape. Bidder shall provide and install one (1) six (6) foot 1/2" helax jumper and compatible connectors for each antenna to provide connectivity from the antenna to the 7/8' heliax cable. Each connector must be properly sealed and weatherproof.

Project Name	INSTALLATION OF ONE SELF SUPPORTING COMMUNICATIONS TOWER FOR BEAVER COUNTY EMERGENCY SERVICES
Awarding Agency:	COUNTY OF BEAVER
Contract Award Date:	7/9/2019
Serial Number:	19-04701
Project Classification:	Building/Heavy/Highway
Determination Date:	6/6/2019
Assigned Field Office;	Pittsburgh
Field Office Phone Number:	(412)565-5300
Toll Free Phone Number:	(877)504-8354
Project County:	Beaver County

Project: 19-04701 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Asbestos & Insulation Workers	8/1/2017		\$36,66	\$24.25	\$60.91
Asbestos & Insulation Workers	8/1/2018		\$37.11	\$24.80	\$61.91
Boilermakers	6/1/2016		\$40.90	\$27.61	\$68.51
Bricklayer (Stone Mason)	12/1/2017		\$29.85	\$22.07	\$51.92
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2017		\$33.01	\$16.63	\$49,64
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2018	5/31/2019	\$33.75	\$17.34	\$51.09
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2019	5/31/2020	\$34.72	\$17.82	\$52,54
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2020	5/31/2021	\$35.48	\$18.56	\$54.04
Carpenters, Drywall Hangers, Framers, Instrument Men, Lathers, Soft Floor Layers	6/1/2021		\$36.23	\$19.31	\$55.54
Cement Finishers	6/1/2016		\$28.71	\$17.85	\$46.56
Cement Masons	6/1/2018		\$28.74	\$16.84	\$45.58
Drywall Finisher	6/1/2017		\$27.80	\$19,14	\$46.94
Drywall Finisher	6/1/2018		\$28.10	\$19.99	\$48,09
Electricians	1/1/2018		\$37.55	\$23.78	\$61.33
Electricians	12/31/2018		\$38.55	\$24.48	\$63.03
Elevator Constructor	1/1/2018		\$47.22	\$33.00	\$80.22
Glazier	9/1/2017		\$28.00	\$22.60	\$50.60
Glazier	9/1/2018		\$28.62	\$23.23	\$51.85
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2017		\$33.54	\$30.24	\$63.78
Iron Workers	6/1/2018		\$34.49	\$31.17	\$65,66
Iron Workers	6/1/2019		\$35.49	\$32.30	\$67.79
Laborers (Class 01 - See notes)	1/1/2018		\$22,32	\$16.67	\$38.99
Laborers (Class 01 - See notes)	1/1/2019		\$23.37	\$17.67	\$41.04
Laborers (Class 01 - See notes)	1/1/2020		\$26.42	\$14.67	\$41.09
Laborers (Class 01 - See notes)	1/1/2021		\$27.47	\$14.67	\$42.14
Laborers (Class 02 - See notes)	1/1/2018		\$22.47	\$16.67	\$39.14
Laborers (Class 02 - See notes)	1/1/2019		\$22.52	\$17.67	\$40.19
Laborers (Class 02 - See notes)	1/1/2020		\$26.57	\$14.67	\$41.24
Laborers (Class 02 - See notes)	1/1/2021		\$27.62	\$14.67	\$42,29
Laborers (Class 03 - See notes)	1/1/2018		\$22.60	\$16,67	\$39.27
Laborers (Class 03 - See notes)	1/1/2019		\$22.65	\$17.67	\$40.32
Laborers (Class 03 - See notes)	1/1/2020		\$26.70	\$14.67	\$41.37
Laborers (Class 03 - See notes)	1/1/2021		\$27.75	\$14.67	\$42.42
Laborers (Class 04 - See notes)	1/1/2018		\$23.07	\$16.67	\$39.74
Laborers (Class 04 - See notes)	1/1/2019		\$23,12	\$17.67	\$40.79
Laborers (Class 04 - See notes)	1/1/2020		\$27.17	\$14.67	\$41.84
Laborers (Class 04 - See notes)	1/1/2021		\$28.22	\$14.67	\$42.89
Landscape Laborer (Skilled)	1/1/2018		\$21.01	\$15.31	\$36.32
Landscape Laborer (Skilled)	1/1/2019		\$21.44	\$16.08	\$37.52
Landscape Laborer (Tractor Operator)	1/1/2018		\$21.31	\$15.31	\$36,62

Project: 19-04701 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Landscape Laborer (Tractor Operator)	1/1/2019		\$21.74	\$16.08	\$37.82
Landscape Laborer	1/1/2018		\$20.59	\$15.31	\$35.90
Landscape Laborer	1/1/2019		\$21.02	\$16.08	\$37.10
Millwright	6/1/2017		\$39.83	\$18.57	\$58,40
Operators (Class 01 - see notes)	6/12/2017		\$34.49	\$20,15	\$54.64
Operators (Class 01 - see notes)	6/1/2018		\$35,09	\$20.95	\$56.04
Operators (Class 01 - see notes)	6/1/2019		\$35.69	\$21.75	\$57.44
Operators (Class 01 - see notes)	6/1/2020		\$36.39	\$22.55	\$58.94
Operators (Class 01 - see notes)	6/1/2021		\$37.09	\$23.35	\$60.44
Operators (Class 02 -see notes)	6/12/2017		\$29.58	\$20.15	\$49.73
Operators (Class 02 -see notes)	6/1/2018		\$29.90	\$20.95	\$50.85
Operators (Class 02 -see notes)	6/1/2019		\$30.22	\$21.75	\$51.97
Operators (Class 02 -see notes)	6/1/2020		\$30.62	\$22,55	\$53.17
Operators (Class 02 -see notes)	6/1/2021		\$31.02	\$23.35	\$54.37
Operators (Class 03 - See notes)	6/12/2017		\$28.25	\$20.15	\$48,40
Operators (Class 03 - See notes)	6/1/2018		\$28.46	\$20.95	\$49.41
Operators (Class 03 - See notes)	6/1/2019		\$28.67	\$21.75	\$50.42
Operators (Class 03 - See notes)	6/1/2020		\$28.95	\$22.55	\$51.50
Operators (Class 03 - See notes)	6/1/2021		\$29.23	\$23.35	\$52,58
Painters Class 6 (see notes)	6/1/2017		\$27.50	\$18.66	\$46.16
Painters Class 6 (see notes)	6/1/2018		\$28.00	\$19.36	\$47.36
Painters Class 6 (see notes)	6/1/2019		\$28.50	\$20.06	\$48.56
Pile Driver Divers (Building, Heavy, Highway)	1/1/2018		\$50.33	\$18,55	\$68.88
Pile Driver Divers (Building, Heavy, Highway)	1/1/2019		\$51.45	\$19.30	\$70.75
Piledrivers	1/1/2018		\$33.55	\$18.55	\$52.10
Piledrivers	1/1/2019		\$34.30	\$19.30	\$53.60
Plasterers	6/1/2017		\$28.79	\$15.79	\$44.58
Plasterers	6/1/2018		\$28.74	\$16.84	\$45.58
Plasterers	6/1/2019		\$29.78	\$17.20	\$46,98
plumber	6/1/2018		\$40.85	\$21.77	\$62,62
plumber	6/1/2019		\$43.00	\$21.77	\$64.77
plumber	6/1/2020		\$45.15	\$21.77	\$66:92
plumber	6/1/2021		\$47.25	\$21,77	\$69.02
plumber	6/1/2022		\$49,35	\$21.77	\$71,12
Plumbers	6/1/2017		\$39.20	\$21.27	\$60.47
Pointers, Caulkers, Cleaners	12/1/2017		\$29.88	\$18.73	\$48.6
Roofers	6/1/2017		\$31.00	\$15.17	\$46.17
Roofers	6/1/2018		\$31.00	\$16.42	\$47.42
Roofers	6/1/2019		\$34.83	\$13.84	\$48.67
Roofers	6/1/2020		\$36.08	\$13.84	\$49.92
Sheet Metal Workers	7/1/2017		\$33.70	\$27,74	\$61.44
Sheet Metal Workers	7/1/2018		\$34.47	\$28,08	\$62.5
Sprinklerfitters	4/1/2017		\$37.40	\$21.74	\$59.1
Sprinklerfitters	4/1/2018		\$38.80	\$22.74	\$61.5

Project: 19-04701 - Building	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Steamfitters	6/1/2017		\$41,71	\$19.01	\$60.72
Steamfitters	6/1/2018		\$40.55	\$22,67	\$63,22
Terrazzo Finisher	12/1/2017		\$31.08	\$15.85	\$46,93
Terrazzo Finisher	6/1/2019		\$32.01	\$16.52	\$48,53
Terrazzo Mechanics	12/1/2017		\$30.57	\$17.91	\$48.48
Terrazzo Mechanics	6/1/2019		\$31.31	\$18,67	\$49.98
Tile Finisher	12/1/2017		\$25,16	\$14,90	\$40.06
Tile Setter	12/1/2017		\$30.75	\$19.05	\$49.80
Truckdriver class 1(see notes)	1/1/2016		\$27.62	\$16.60	\$44,22
Truckdriver class 2 (see notes)	1/1/2016		\$27.75	\$16.69	\$44,44
Truckdriver class 3 (see notes)	1/1/2016		\$28.23	\$16 <sub>.</sub> 98	\$45.21

Project: 19-04701 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Carpenter	1/1/2018	12/31/2018	\$33.17	\$17.77	\$50.94
Carpenter	1/1/2019		\$34,02	\$18.42	\$52.44
Carpenter Welder	1/1/2018	12/31/2018	\$34.12	\$17.77	\$51.89
Carpenter Welder	1/1/2019		\$34.97	\$18.42	\$53.39
Cement Finishers	1/1/2017		\$30.14	\$19.40	\$49.54
Cement Finishers	1/1/2018		\$31.04	\$19.90	\$50.94
Cement Finishers	1/1/2019		\$31.94	\$20,50	\$52.44
Electric Lineman	5/29/2017		\$45.24	\$24.23	\$69.47
Electric Lineman	5/28/2018		\$46.29	\$25.26	\$71.55
Electric Lineman	5/27/2019		\$47,38	\$26.30	\$73.68
Iron Workers (Bridge, Structural Steel, Ornamental, Precast, Reinforcing)	6/1/2017		\$33.54	\$30.24	\$63.78
Laborers (Class 01 - See notes)	1/1/2017		\$24.85	\$20.95	\$45.80
Laborers (Class 01 - See notes)	1/1/2018		\$24.85	\$22.35	\$47.20
Laborers (Class 01 - See notes)	1/1/2019		\$24.85	\$23.85	\$48.70
Laborers (Class 02 - See notes)	1/1/2017		\$25.01	\$20.95	\$45,96
Laborers (Class 02 - See notes)	1/1/2018		\$25.01	\$22,35	\$47.36
Laborers (Class 02 - See notes)	1/1/2019		\$25.01	\$23.85	\$48.86
Laborers (Class 03 - See notes)	1/1/2017		\$25.40	\$20.95	\$46.35
Laborers (Class 03 - See notes)	1/1/2018		\$25,40	\$22.35	\$47.75
Laborers (Class 03 - See notes)	1/1/2019		\$25.40	\$23.85	\$49.25
Laborers (Class 04 - See notes)	1/1/2017		\$25.85	\$20.95	\$46.80
Laborers (Class 04 - See notes)	1/1/2018		\$25.85	\$22.35	\$48.20
Laborers (Class 04 - See notes)	1/1/2019		\$25.85	\$23.85	\$49.70
Laborers (Class 05 - See notes)	1/1/2017		\$26.26	\$20.95	\$47.21
Laborers (Class 05 - See notes)	1/1/2018		\$26.26	\$22.35	\$48.61
Laborers (Class 05 - See notes)	1/1/2019		\$26.26	\$23.85	\$50.11
Laborers (Class 06 - See notes)	1/1/2017		\$23.10	\$20.95	\$44.05
Laborers (Class 06 - See notes)	1/1/2018		\$23.10	\$22.35	\$45.45
Laborers (Class 06 - See notes)	1/1/2019		\$23,10	\$23.85	\$46.95
Laborers (Class 07 - See notes)	1/1/2017		\$25,85	\$20.95	\$46.80
Laborers (Class 07 - See notes)	1/1/2018		\$25.85	\$22.35	\$48.20
Laborers (Class 07 - See notes)	1/1/2019		\$25.85	\$23.85	\$49.70
Laborers (Class 08 - See notes)	1/1/2017		\$27.35	\$20.95	\$48.30
Laborers (Class 08 - See notes)	1/1/2018		\$27.35	\$22,35	\$49.70
Laborers (Class 08 - See notes)	1/1/2019		\$27,35	\$23.85	\$51.20
Operators (Class 01 - see notes)	1/1/2017		\$30,69	\$19.98	\$50.67
Operators (Class 01 - see notes)	1/1/2018		\$31.29	\$20.78	\$52.07
Operators (Class 01 - see notes)	1/1/2019		\$31.89	\$21.68	\$53.57
Operators (Class 02 -see notes)	1/1/2017		\$30.43	\$19.98	\$50.41
Operators (Class 02 -see notes)	1/1/2018		\$31.03	\$20.78	\$51.81
Operators (Class 02 -see notes)	1/1/2019		\$31.63	\$21.68	\$53.31
Operators (Class 03 - See notes)	1/1/2017		\$26.78	\$19.98	\$46.76
Operators (Class 03 - See notes)	1/1/2018		\$27.38	\$20,78	\$48,16
Operators (Class 03 - See notes)	1/1/2019		\$27.98	\$21.68	\$49,66

Commonwealth of Pennsylvania Report Date: 6/6/2019

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Project: 19-04701 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Operators (Class 04 - See notes)	1/1/2017		\$26,32	\$19,98	\$46,30
Operators (Class 04 - See notes)	1/1/2018		\$26,92	\$20.78	\$47.70
Operators (Class 04 - See notes)	1/1/2019		\$27.52	\$21.68	\$49.20
Operators (Class 05 - See notes)	1/1/2017		\$26,07	\$19.98	\$46,05
Operators (Class 05 - See notes)	1/1/2018		\$26,67	\$20.78	\$47,45
Operators (Class 05 - See notes)	1/1/2019		\$27.27	\$21.68	\$48.95
Painters Class 1 (see notes)	6/1/2016		\$31.58	\$17.58	\$49.16
Painters Class 1 (see notes)	6/1/2017		\$31,85	\$18.66	\$50.51
Painters Class 1 (see notes)	6/1/2017		\$31.98	\$18.43	\$50.41
Painters Class 1 (see notes)	6/1/2018		\$32.50	\$19.36	\$51.86
Painters Class 1 (see notes)	6/1/2019		\$33,15	\$20.06	\$53.21
Painters Class 2 (see notes)	6/1/2016		\$31.58	\$17,58	\$49.16
Painters Class 2 (see notes)	6/1/2017		\$33.95	\$18,66	\$52,61
Painters Class 2 (see notes)	6/1/2017		\$34.08	\$18.43	\$52.51
Painters Class 2 (see notes)	6/1/2018		\$34.60	\$19.36	\$53,96
Painters Class 2 (see notes)	6/1/2019		\$35.25	\$20.06	\$55,31
Painters Class 3 (see notes)	6/1/2016		\$33.68	\$17.58	\$51.26
Painters Class 3 (see notes)	6/1/2017		\$27.58	\$18.48	\$46.06
Painters Class 3 (see notes)	6/1/2017		\$33.95	\$18.66	\$52.61
Painters Class 3 (see notes)	6/1/2018		\$34.60	\$19.36	\$53.96
Painters Class 3 (see notes)	6/1/2019		\$35,25	\$20.06	\$55.31
Painters Class 4 (see notes)	6/1/2016		\$26.95	\$17.58	\$44.53
Painters Class 4 (see notes)	6/1/2017		\$27.27	\$18.43	\$45,70
Painters Class 4 (see notes)	6/1/2017		\$27.16	\$18.66	\$45.82
Painters Class 4 (see notes)	6/1/2018		\$27.68	\$19.36	\$47.04
Painters Class 4 (see notes)	6/1/2019		\$28.20	\$20.06	\$48.26
Painters Class 5 (see notes)	6/1/2016		\$21.90	\$17.58	\$39.48
Painters Class 5 (see notes)	6/1/2017		\$22.16	\$18,43	\$40.59
Painters Class 5 (see notes)	6/1/2017		\$22.07	\$18.66	\$40,73
Painters Class 5 (see notes)	6/1/2018		\$22.49	\$19.36	\$41.85
Painters Class 5 (see notes)	6/1/2019		\$22,91	\$20.06	\$42.97
Pile Driver Divers (Building, Heavy, Highway)	1/1/2017		\$49.13	\$17.95	\$67.08
Pile Driver Divers (Building, Heavy, Highway)	1/1/2018		\$50.33	\$18.55	\$68.88
Pile Driver Divers (Building, Heavy, Highway)	1/1/2019		\$51.45	\$19.30	\$70.75
Piledrivers	1/1/2017		\$32.75	\$17.95	\$50,70
Piledrivers	1/1/2018		\$33.55	\$18.55	\$52.10
Piledrivers	1/1/2019		\$34.30	\$19.30	\$53,60
Steamfitters (Heavy and Highway - Gas Distribution)	5/1/2017		\$40.98	\$32.53	\$73.51
Truckdriver class 1(see notes)	1/1/2017		\$28.10	\$17.42	\$45.52
Truckdriver class 1(see notes)	1/1/2018		\$28.52	\$18.40	\$46.92
Truckdriver class 1(see notes)	1/1/2019		\$28,99	\$19.43	\$48.42
Truckdriver class 2 (see notes)	1/1/2017		\$28.24	\$17,50	\$45.74
Truckdriver class 2 (see notes)	1/1/2018		\$28.66	\$18.48	\$47.14
Truckdriver class 2 (see notes)	1/1/2019		\$29.13	\$19.51	\$48.64

Project: 19-04701 - Heavy/Highway	Effective Date	Expiration Date	Hourly Rate	Fringe Benefits	Total
Truckdriver class 3 (see notes)	1/1/2017		\$28,71	\$17_80	\$46,51
Truckdriver class 3 (see notes)	1/1/2018		\$29.13	\$18.78	\$47.91
Truckdriver class 3 (see notes)	1/1/2019		\$29.59	\$19.82	\$49.41

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